

Application No.: 09/284,339

Docket No.: 22223-00001-US

AMENDMENTS TO THE CLAIMS

Claims 196-202. (Canceled)

203. (New) A mobile electronic commerce system comprising:

a mobile user terminal;

a service providing system that issues and transmits electronic value card information to the mobile user terminal; and

an examination terminal, wherein:

the mobile user terminal comprises a remote wireless communication section and a local wireless communication section;

the mobile user terminal receives and holds the electronic value card information issued by the service providing system via the remote wireless communication section;

the examination terminal examines the validity of the electronic value card information held by the mobile user terminal; and

the electronic value card information comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity of the electronic value card information.

204. (New) The mobile electronic commerce system according to claim 203, wherein:

the electronic value card information comprises variable value data; and

the mobile user terminal changes the variable value data according to an instruction received from the examination terminal after the mobile user terminal has authenticated the examination terminal.

205. (New) The mobile electronic commerce system according to claim 203, wherein the service providing system generates a secret key, encrypts the electronic value card information upon issue using the secret key, and transmits the encrypted electronic value card information to the mobile user terminal.

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206. (New) The mobile electronic commerce system according to claim 203, wherein the mobile user terminal informs the user when the electronic value card information is received and when the examination of the electronic value card information is examined.

207. (New) The mobile electronic commerce system according to claim 203, wherein the electronic value card information comprises data with at least a content of a ticket or a payment card.

208. (New) The mobile electronic commerce system according to claim 203, wherein the examination terminal comprises at least a gate terminal, a merchant terminal, and an automatic vending machine.

209. (New) The mobile electronic commerce system according to claim 203, wherein:
the service providing system transmits information for use in the examination of the electronic value card information to the examination terminal;

the examination terminal comprises a remote communication section and a local wireless communication section;

the examination terminal receives and holds the information from the service providing system via the remote communication section; and

the information from the service providing system comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity of the electronic value card information.

210. (New) The mobile electronic commerce system according to claim 203, wherein:
the electronic value card information comprises program data specifying a display of the electronic value card information; and

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the mobile user terminal displays the electronic value card information based on said program data.

211. (New) The mobile electronic commerce system according to claim 203, wherein the electronic value card information comprises at least ticket program data or payment card program data.

212. (New) A mobile user terminal in a mobile electronic commerce system comprising at least a mobile user terminal, a service providing system and an examination terminal that examines the validity of electronic value card information held by the mobile user terminal, wherein:

the mobile user terminal comprises a remote wireless communication section and a local wireless communication section;

the mobile user terminal receives and holds electronic value card information issued by the service providing system via the remote wireless communication section; and

the electronic value card information comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity of the electronic value card information.

213. (New) The mobile user terminal according to claim 212, wherein:

the electronic value card information comprises variable value data; and

when the mobile user terminal changes the variable value data according to an instruction from the examination terminal after the mobile user terminal has authenticated the examination terminal.

214. (New) The mobile user terminal according to claim 212, wherein the mobile user terminal informs the user when the electronic value card information is received and when the examination of the electronic value card information is examined.

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215. (New) The mobile user terminal according to claim 212, wherein the electronic value card information comprises data with at least a content of a ticket or a payment card.

216. (New) The mobile user terminal according to claim 212, wherein:
the electronic value card information comprises program data specifying a display of the electronic value card information; and
the mobile user terminal displays the electronic value card information based on said program data.

217. (New) The mobile user terminal according to claim 212, wherein the electronic value card information comprises at least ticket program data or payment card program data.

218. (New) The mobile user terminal according to claim 212, wherein the mobile user terminal comprises a switch for changing a mode of use of the electronic value card information.

219. (New) An IC card in a mobile electronic commerce system comprising at least a mobile user terminal that comprises a remote wireless communication section and a local wireless communication section, a service providing system, an examination terminal that examines the validity of electronic value card information held by the mobile user terminal, and the IC card, wherein:

the IC card is installed in the mobile user terminal and receives and holds electronic value card information issued by the service providing system via the remote wireless communication section; and

the electronic value card information comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity of the electronic value card information.

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220. (New) The IC card according to claim 219, wherein:
the electronic value card information comprises variable value data; and
the IC card changes the variable value data according to an instruction from the examination terminal after the IC card has authenticated the examination terminal.

221. (New) The IC card according to claim 219, wherein the electronic value card information comprises data with at least a content of a ticket or a payment card.

222. (New) The IC card according to claim 219, wherein:
the electronic value card information comprises program data specifying a display of the electronic value card information; and
the mobile user terminal displays the electronic value card information based on said program data.

223. (New) The IC card according to claim 219, wherein the electronic value card information comprises at least ticket program data or payment card program data.

224. (New) An examination terminal in the mobile electronic commerce system comprising at least a mobile user terminal, a service providing system and the examination terminal that examines the validity of electronic value card information held by the mobile user terminal, wherein:

the examination terminal comprises a remote communication section and a local wireless communication section;

the examination terminal receives and holds information for use in an examination of the electronic value card information via the remote communication section; and

the information for use in the examination of the electronic value card information comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity of the electronic value card information.

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225. (New) The examination terminal according to claim 224, wherein the examination terminal comprises at least a gate terminal, a merchant terminal and an automatic vending machine.

226. (New) A service providing system comprising:

a mobile user terminal that comprises a remote wireless communication section and a local wireless communication section;

an examination terminal that examines the validity of electronic value card information held by the mobile user terminal, wherein:

the service providing system issues and transmits the electronic value card information to the mobile user terminal; and

the electronic value card information comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity of the electronic value card information.

227. (New) The service providing system according to claim 226, wherein the electronic value card information comprises variable value data which the mobile user terminal changes according to an instruction from the examination terminal after the mobile user terminal has authenticated the examination terminal.

228. (New) The service providing system according to claim 226, wherein the service providing system generates a secret key and encrypts the electronic value card information upon issue using the secret key and transmits the encrypted electronic value card information to the mobile user terminal.

229. (New) The service providing system according to claim 226, wherein the electronic value card information comprises data with at least a content of a ticket or a payment card.

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230. (New) The service providing system according to claim 226, wherein:
the service providing system transmits information for use in an examination of the electronic value card information to the examination terminal; and
the information for use in the examination of the electronic value card information comprises at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal via the local wireless communication section when the examination terminal examines the validity the electronic value card information.

231. (New) The service providing system according to claim 226, wherein:
the electronic value card information comprises program data specifying a display of the electronic value card information; and
the mobile user terminal displays the electronic value card information based on said program data.

232. (New) The service providing system according to claim 226, wherein the electronic value card information comprises at least ticket program data or payment card program data.

233. (New) In an electronic commerce system comprising at least a mobile user terminal that comprises a remote wireless communication section and a local wireless communication section, a service providing system that communicates with the mobile user terminal, and an examination terminal, a method of issuing electronic value card information in the service providing system to the mobile user terminal, said method comprising:

at the mobile user terminal, making a request for a purchase of electronic value card information via the remote wireless communication section;

at the service providing system, in response to the request for the purchase from the mobile user terminal, generating electronic value card information comprising at least one key data for use in a mutual challenge response authentication process executed between the mobile user terminal and the examination terminal in line of sight of a user of the mobile user terminal

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via the local wireless communication section when the examination terminal examines the validity of the electronic value card information held by the mobile user terminal; and
at the service providing system, issuing the electronic value card information to the mobile user terminal after a payment is settled.

234. (New) A mobile electronic commerce system comprising a transferring mobile user terminal, a recipient mobile user terminal, and a service providing system, wherein:

the transferring mobile user terminal transmits to the recipient mobile user terminal a message comprising a certificate of transfer of an electronic value card information electronically signed by a unique key included in said electronic value card information;

the recipient mobile user terminal, after examining content of the message comprising the certificate from the transferring mobile user terminal, transmits to the service providing system a message comprising a request for transfer processing including said certificate; and

the service providing system, after examining content of the message comprising the request for transfer processing from the recipient mobile user terminal, generates a new unique key, generates the electronic value card information requested to be transferred including said new unique key, and transmits to said recipient mobile user terminal, a message comprising said electronic value card information.

235. (New) A mobile electronic commerce system including an install card, a mobile user terminal, a service providing system, and a value information issuing system, wherein:

the install card has recorded therein identification information that specifies electronic value card information;

the mobile user terminal comprises:

an input section that receives as input the identification information recorded in the install card;

a first transmitter that transmits to the service providing system a first message comprising the identification information that was received as input; and

a first receiver that receives from the service providing system a fourth message comprising electronic value card information specified by the identification information;

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the service providing system comprises:

a second receiver that receives from the mobile user terminal the first message and receives from the value information issuing system a third message committing an issue of electronic value card information that has not been issued earlier and that is specified by the identification information; and

a second transmitter that transmits a second message comprising the identification information, generates and issues the electronic value card information in response to the third message, and transmits to the mobile user terminal the fourth message comprising the electronic value card information issued; and

the value information issuing system comprises:

a third receiver that receives from the service providing system the second message; and

a third transmitter that checks the identification information in the second message against management information of install cards issued earlier, and, if electronic value card information specified by the identification information has not been issued yet, transmits to the service providing system the third message committing an issue of the electronic value card information.

236. (New) A mobile electronic commerce system including a mobile user terminal, an examination terminal, and a service providing system,

wherein the mobile user terminal has electronic value card information, updates an electronic value of the electronic value card information in accordance with an instruction received from the service providing system, and transmits to the service providing system a message that certifies use of the electronic value card information to the service providing system and that is electronically signed with a unique key included in the electronic value card information.